ABSTRACT OF THE DISCLOSURE

It is an object of the present invention to provide a method for simply producing a high purity silicon carbide sintered body having no remaining metal silicon and excellent heat resistance. A method for producing a silicon carbide sintered body of the present invention comprises the steps of: preparing a slurry by dispersing silicon carbide powder in a solvent; forming a molded body by pouring the slurry into a mold and effecting calcination for the slurry in a vacuum atmosphere or in an inert gas atmosphere; and sealing pores within the calcined molded body by impregnating the pores with high purity metal silicon molten by heating, and allowing the high purity metal silicon and carbon contained in the molded body to react on each other in the pores so as to produce silicon carbide.